

TECHNICAL MEMORANDUM**City of Alexandria Storm Sewer Capacity Analysis****Task Order 2B – Cleaning & CCTV (King St, Beauregard St, and Walter Reed Dr)****PREPARED FOR:** CH2M HILL**PREPARED BY:** Baker**DATE:** April 2, 2012 (Revised Aug 7, 2012)**Field Work Summary (February 24, 2011)**

VPS performed CCTV inspections of the storm pipes at the intersection of King Street and Beauregard Street/Walter Reed Drive. VPS used an arbitrary naming convention to label the starting and ending structures. Therefore, Baker has created a conversion table to link the manhole labels in VPS' report to the correct Structure IDs as found in the City's GIS. An aerial map of the City's GIS has been marked to show which pipes were inspected and is included in this Memorandum.

| VPS Structure No. (From Report) | City GIS Facility ID |
|------------------------------------|----------------------|
| 1 | 000185ND |
| 2 | 000391SMH |
| 2A | 009022IN |
| 3 | 000393SMH |
| 4 | 000369SMH |
| 5 | 000374SMH |
| 6 | 000186ND |

The inspection of the pipe connecting structures 000391SMH and 000393SMH was not completed beyond 34 feet downstream from 000391SMH due to the presence of heavy debris that could not be cleared using regular cleaning methods. The blockage consisted of bricks, concrete slabs, and other metal objects. Removal will require heavy cleaning methods using mechanical tools and manned entry to the pipe. The remaining pipes showed some minor defects, such as cracks or fractures, but otherwise showed to be in good condition. In addition, VPS inspected an additional 100 foot long section of 84-inch pipe (000393SMH – 009022IN) that was not identified in the City's GIS. This pipe did not show any defects.

During the inspection activities, VPS cracked the lid of 000185ND while attempting to dislodge it. VPS placed a temporary cover with cones over the opening while a replacement was ordered. The new lid has since been installed.

Condition Assessment Summary

Field inspection was completed based on the rating process in the SCREAM database. VPS did not record any significant defects with the inspected structures. Minor deteriorations of manhole structures were observed; cracked and/or corroded frame base seal, chimney, and chamber. Manhole and Lamping inspection forms are included in Appendix A.



Beauregard

Approximate location of blockage and heavy debris. Inspection abandoned at this point.

Storm Pipes Inspected by VPS

Pipes

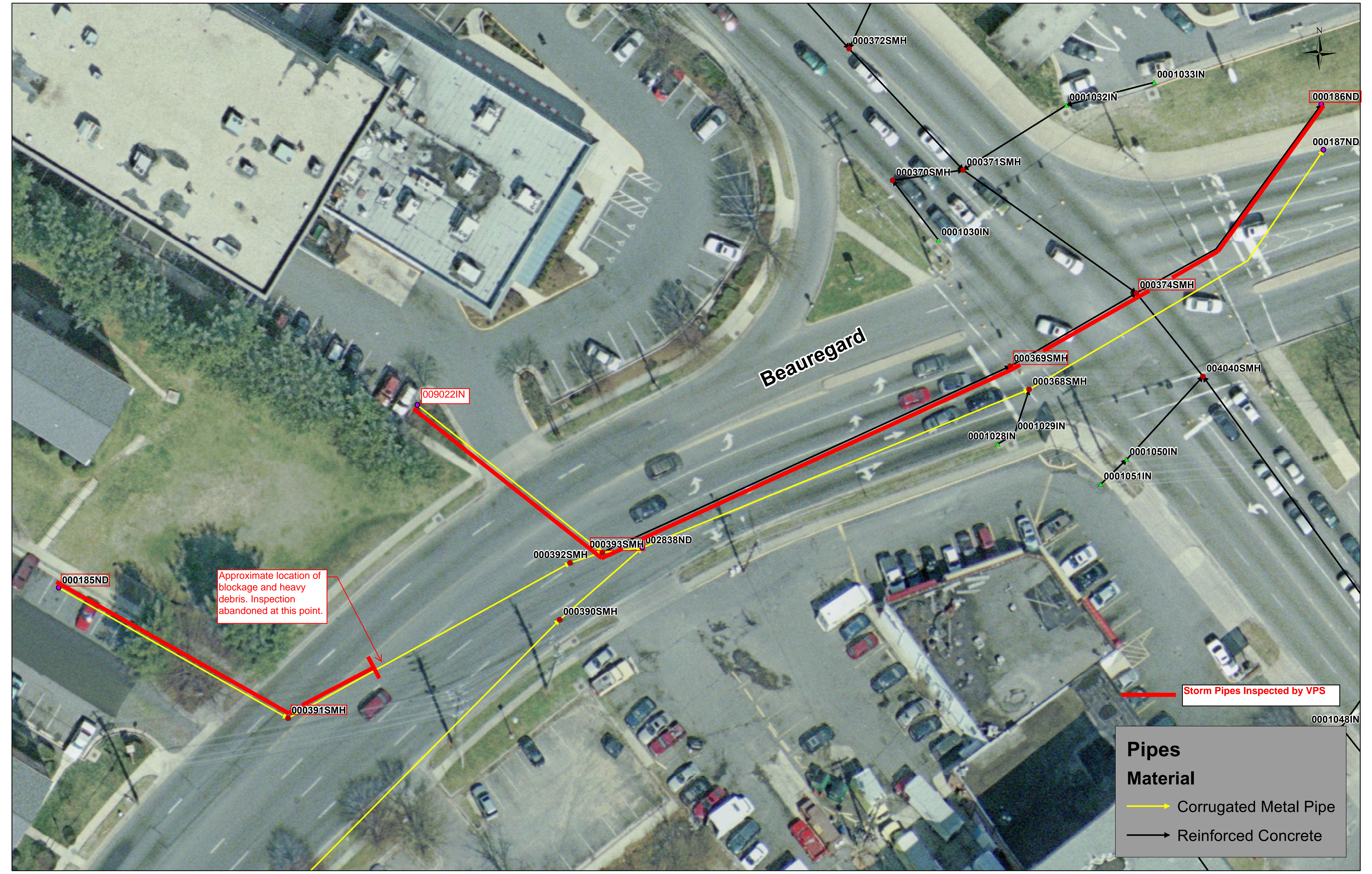
Material

→

Corrugated Metal Pipe

→

Reinforced Concrete



APPENDIX A
MANHOLE LAMPING AND INSPECTION FORMS

Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole N **000391SMH**

Inspection Information

Insp Date/Time **3/12/2012**
 Crew **Truck 1**
 Crew Affiliation **Field1**
 Permit No **V08093003**
 Insp Purpose **Routine assessment/asse**
 Inspection Type **Surface Inspection**
 Why not Inspected

Owner Information

Project No.
 Project No. 2
 Project Name
 Map No
 Use of Sewer **Stormwater**

Manhole Information

Structure Type **Manhole Standard**
 Coating/Liner Type **None - No Coating/Lining**
 Address **3400** **N BEAUREGARD ST**
 City, State, Zip **Alexandria, VA 00000**
 Location Code **Light Highway Rural Street**
 X **11879173.8** Y **6992415.294**
 Elevation **140.79**
 Grade (0, +, -)
 Flow Type
 DS pipe length(ft)
 Depth to MH Invert(ft) **13.7**
 Pre-cleaning **No Pre-Cleaning**

☒ Complete ☐ Quick ☐ Incomplete ☐ Returned

Inspection Setting Information

MH Surface Type **Asphalt**
 Traffic Volume **Medium/Fair**
 Traffic Type **3 - 4 Lane**
 Weather **Dry**
 Ground Cond **Dry**

Manhole-Upper

Corrosion deterioration widespread ☒ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4
 Coating/lining deterioration

Manhole-Lower

Corrosion deterioration widespread ☒ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4
 Coating/lining deterioration

Cover / Adjustment Ring / Cover Insert

☐ No Cover ☒ No Cover Insert
☒ No Cover Gasket ☒ No Cover Adjustment Ring

Cover Type **Solid**
 Cover material **Cast Iron**

Cover Diam(ft) **24**
 Cover Width(ft)
 Cover Thickness(in) **3.25**
 No of vent holes **2**
 Avg vent hole dia(in) **1**
 Adj ring height(in)
 Cover bear surf diam/width
 Ponding depth(ft)
 Tributary area(sq ft)

Cover

| | 0 | 1 | 2 | 3 | 4 |
|-------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Missing or Displaced | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cracked / deteriorated | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Fit in Frame | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Surface wear | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Missing Bolts or Broken Bolts | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Frame and Frame Seal

☐ No Frame ☐ No Frame Base Seal

Frame material **3**
 Frame bearing surf diam(in) **24**
 Frame bearing surf width(in)
 Frame bearing surf dwell(in) **1**
 Frame offset dist(in)
 Frame depth(in) **8**
 Frame seal material **39**
 Clear opening diam(in) **22**
 Clear opening width(in)

Frame cont.

Frame

| | 0 | 1 | 2 | 3 | 4 |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Cracked / broken / deteriorated | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Missing Bolts or Broken Bolts | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Offset | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Frame Base Seal

| | 0 | 1 | 2 | 3 | 4 |
|---------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Cracked / deteriorated | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I/I evidence | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Chimney (Shaft) / Grade Ring Reducer (Cone, Slab) Chamber (Wall)

☒ No Chimney (Shaft) Seal ☒ No Grade Ring
☐ No Chimney (Shaft) ☒ No Reducer (Cone, Slab)

Material Diam in Width in Depth ft

Chimney **5** **6.8**

Chamber **5** **4.5**

Chimney (Shaft)

| | 0 | 1 | 2 | 3 | 4 |
|-----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Previous rehab | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cracked | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mortar missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Collapse | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I/I evidence | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Chamber (Wall) cont.

Chamber

| | 0 | 1 | 2 | 3 | 4 |
|-----------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| Cracked | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mortar missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Grease | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Utility conduit | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Joint Offset or Seal | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Collapse | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Lift hole plugs missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I/I evidence | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Bench Steps

Channel (Invert)

☐ No Bench ☒ No Steps
☐ No Channel ☒ No Common MH Partition

Surcharge Depth(ft)

Bench material **Precast Concrete**

Channel material **Precast Concrete**

Bench

| | 0 | 1 | 2 | 3 | 4 |
|-----------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Cracked | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mortar missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Grease | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Debris/deposition | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I/I evidence | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Channel

| | 0 | 1 | 2 | 3 | 4 |
|-------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Cracked | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mortar missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Grease | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Debris/deposition | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pipe segment cracked, spalled | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Hydraulic flow | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I/I evidence | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Alexandria Manhole and Lamping Inspection Form

Basin No.

FOUR MILE RUN

Manhole N

000391SMH

Notes / Sketch

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia | | | | | | | | | | | | |
|---|---|---------------|---------------|---|-----------|--------------------------|--------------------------|-------|----------|------------------|-----|--|----------|--|-----------|--------------|---|-------------------------------|---|--------------|---|-----------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 000185ND | <input checked="" type="checkbox"/> In <input type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 13.7 | Circular | Corrugated Metal | 54 | | | | | | | | | | | | |
| Pipe Seal Condition <table border="1"> <thead> <tr> <th></th> <th>Severity</th> </tr> <tr> <th></th> <th>0 1 2 3 4</th> </tr> </thead> <tbody> <tr> <td>I/I evidence</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Mortar, "boot", or other seal</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Pipe cracked</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Roots Intrusion</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </tbody> </table> | | | | | | | | | | | | | Severity | | 0 1 2 3 4 | I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | Severity | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 2 3 4 | | | | | | | | | | | | | | | | | | | | | | |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 000392SMH | <input type="checkbox"/> In <input checked="" type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 13.7 | Circular | Corrugated Metal | 57 | | | | | | | | | | | | |
| Pipe Seal Condition <table border="1"> <thead> <tr> <th></th> <th>Severity</th> </tr> <tr> <th></th> <th>0 1 2 3 4</th> </tr> </thead> <tbody> <tr> <td>I/I evidence</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Mortar, "boot", or other seal</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Pipe cracked</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Roots Intrusion</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </tbody> </table> | | | | | | | | | | | | | Severity | | 0 1 2 3 4 | I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | Severity | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 2 3 4 | | | | | | | | | | | | | | | | | | | | | | |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |



Alexandria Manhole and Lamping Inspection Form

Basin No.

FOUR MILE RUN

Manhole N

000391SMH

Photos

| Photo Name | Description | PhotoType | Old Photo Name |
|---|-------------------------------------|---|----------------|
| 000391SMH_Cover_20120312_6111.JPG | | Cover | 0908401J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe | |
| 000391SMH_Frame_20120312_6112.JPG | | Frame | 0909031J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe | |
| 000391SMH_Chamber_20120312_6113.JPG | | Chamber | 0910021J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe | |
| 000391SMH_General_20120312_6114.JPG | SIZE OF INCOMING PIPE FROM 000185ND | General | 0910501J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe | |
| 000391SMH_General_20120312_6115.JPG | INCOMING PIPE FROM 000185ND | General | 0910591J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe | |
| 000391SMH_General_20120312_6116.JPG | INCOMING PIPE FROM 000185ND | General | 0911121J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe | |
| 000391SMH_General_20120312_6117.JPG | INCOMING PIPE FROM 000185ND | General | 0911201J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe | |




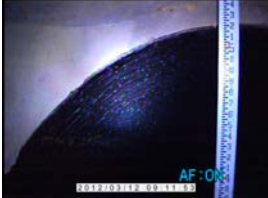




Alexandria Manhole and Lamping Inspection Form

Basin No.

FOUR MILE RUN

Manhole N

000391SMH

| | | | | |
|---|------------------------------------|---------|--------------|---|
| 000391SMH_General_20120312_6118.JPG | INCOMING PIPE FROM 000185ND | General | 0911271J.JPG | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe |
|  | | | | |
| 000391SMH_General_20120312_6119.JPG | SIZE OF OUTGOING PIPE TO 000392SMH | General | 0911531J.JPG | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe |
|  | | | | |
| 000391SMH_General_20120312_6120.JPG | OUTGOING PIPE TO 000392SMH | General | 0912051J.JPG | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe |
|  | | | | |
| 000391SMH_General_20120312_6121.JPG | OUTGOING PIPE TO 000392SMH | General | 0912111J.JPG | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe |
|  | | | | |
| 000391SMH_General_20120312_6122.JPG | OUTGOING PIPE TO 000392SMH | General | 0912231J.JPG | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe |
|  | | | | |
| 000391SMH_General_20120312_6123.JPG | OUTGOING PIPE TO 000392SMH | General | 0912301J.JPG | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe |
|  | | | | |



Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000393SMH**

Inspection Information

Insp Date/Time **3/9/2012**
 Crew **Truck 1**
 Crew Affiliation **Field1**
 Permit No **V08093003**
 Insp Purpose **Routine assessment/asse**
 Inspection Type **Surface Inspection**
 Why not Inspected

Owner Information

Project No.
 Project No. 2
 Project Name
 Map No
 Use of Sewer **Stormwater**

Manhole Information

Structure Type **Manhole Standard**
 Coating/Liner Type **None - No Coating/Lining**
 Address **4700** **KING ST**
 City, State, Zip **Alexandria, VA 00000**
 Location Code **Light Highway Rural Street**
 X **11879307.78** Y **6992485.984**
 Elevation **139.34**
 Grade (0, +, -, /)
 Flow Type
 DS pipe length(ft)
 Depth to MH Invert(ft) **15.9**
 Pre-cleaning **No Pre-Cleaning**

☒ Complete ☐ Quick ☐ Incomplete ☐ Returned

Inspection Setting Information

MH Surface Type **Asphalt**
 Traffic Volume **Medium/Fair**
 Traffic Type **3 - 4 Lane**
 Weather **Dry**
 Ground Cond **Dry**

Manhole-Upper

Corrosion deterioration widespread ☒ 0 1 2 3 4
 Coating/lining deterioration ☒

Manhole-Lower

Corrosion deterioration widespread ☒ 0 1 2 3 4
 Coating/lining deterioration ☒

Cover / Adjustment Ring / Cover Insert

☐ No Cover ☒ No Cover Insert
☒ No Cover Gasket ☒ No Cover Adjustment Ring

Cover Type **Solid**
 Cover material **Cast Iron**

Cover Diam(ft) **24**
 Cover Width(ft)
 Cover Thickness(in) **3.25**
 No of vent holes **2**
 Avg vent hole dia(in) **1**
 Adj ring height(in)
 Cover bear surf diam/width
 Ponding depth(ft)
 Tributary area(sq ft)

Cover

| | 0 | 1 | 2 | 3 | 4 |
|-------------------------------|-------------------------------------|---|---|---|---|
| Missing or Displaced | <input checked="" type="checkbox"/> | | | | |
| Cracked / deteriorated | <input checked="" type="checkbox"/> | | | | |
| Fit in Frame | <input checked="" type="checkbox"/> | | | | |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | | | | |
| Surface wear | <input checked="" type="checkbox"/> | | | | |
| Missing Bolts or Broken Bolts | <input checked="" type="checkbox"/> | | | | |

Frame cont.

Frame

| | 0 | 1 | 2 | 3 | 4 |
|---------------------------------|-------------------------------------|---|---|---|---|
| Cracked / broken / deteriorated | <input checked="" type="checkbox"/> | | | | |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | | | | |
| Missing Bolts or Broken Bolts | <input checked="" type="checkbox"/> | | | | |
| Offset | <input checked="" type="checkbox"/> | | | | |
| Missing | <input checked="" type="checkbox"/> | | | | |

Frame Base Seal

| | 0 | 1 | 2 | 3 | 4 |
|---------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|---|
| Cracked / deteriorated | | <input checked="" type="checkbox"/> | | | |
| Corroded, pitted, spalled | | | <input checked="" type="checkbox"/> | | |
| Roots Intrusion | <input checked="" type="checkbox"/> | | | | |
| I/I evidence | | <input checked="" type="checkbox"/> | | | |

Chimney (Shaft) / Grade Ring Reducer (Cone, Slab) Chamber (Wall)

☒ No Chimney (Shaft) Seal ☒ No Grade Ring
☐ No Chimney (Shaft) ☒ No Reducer (Cone, Slab)

Material Diam in Width in Depth ft

Chimney **5** **2.2**

Chamber **9** **13.7**

Chimney (Shaft)

| | 0 | 1 | 2 | 3 | 4 |
|-----------------------------|-------------------------------------|-------------------------------------|---|---|---|
| Previous rehab | <input checked="" type="checkbox"/> | | | | |
| Cracked | | <input checked="" type="checkbox"/> | | | |
| Corroded, pitted, spalled | | <input checked="" type="checkbox"/> | | | |
| Mortar missing | <input checked="" type="checkbox"/> | | | | |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> | | | | |
| Collapse | <input checked="" type="checkbox"/> | | | | |
| I/I evidence | | <input checked="" type="checkbox"/> | | | |

Chamber (Wall) cont.

Chamber

| | 0 | 1 | 2 | 3 | 4 |
|-----------------------------|-------------------------------------|---|---|---|---|
| Cracked | <input checked="" type="checkbox"/> | | | | |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | | | | |
| Mortar missing | <input checked="" type="checkbox"/> | | | | |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> | | | | |
| Grease | <input checked="" type="checkbox"/> | | | | |
| Utility conduit | <input checked="" type="checkbox"/> | | | | |
| Joint Offset or Seal | <input checked="" type="checkbox"/> | | | | |
| Collapse | <input checked="" type="checkbox"/> | | | | |
| Lift hole plugs missing | <input checked="" type="checkbox"/> | | | | |
| I/I evidence | <input checked="" type="checkbox"/> | | | | |

Bench Steps Channel (Invert)

☒ No Bench ☒ No Steps
☒ No Channel ☒ No Common MH Partition

Surcharge Depth(ft)

Frame and Frame Seal

☐ No Frame ☐ No Frame Base Seal

Frame material **3**
 Frame bearing surf diam(in) **24**
 Frame bearing surf width(in)
 Frame bearing surf dwell(in) **1**
 Frame offset dist(in)
 Frame depth(in) **8**
 Frame seal material **39**
 Clear opening diam(in) **22**
 Clear opening width(in)

Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000393SMH**

Notes / Sketch

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia |
|-------------------------------------|--------------------------|---------------|---------------|---|-----------|--------------------------|--------------------------|-------|----------|---------------------|-----|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 000369SMH | <input type="checkbox"/> In <input checked="" type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 0 | Circular | Reinforced Concrete | 60 |

Pipe Seal Condition

| | Severity |
|-------------------------------|---|
| | 0 1 2 3 4 |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia |
|-------------------------------------|--------------------------|---------------|---------------|---|-----------|--------------------------|--------------------------|-------|----------|------------------|-----|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 000392SMH | <input checked="" type="checkbox"/> In <input type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 15.3 | Circular | Corrugated Metal | 60 |

Pipe Seal Condition

| | Severity |
|-------------------------------|---|
| | 0 1 2 3 4 |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia |
|-------------------------------------|--------------------------|---------------|---------------|---|-----------|--------------------------|--------------------------|-------|----------|------------------|-----|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FPUR MILE RUN | 002029ND | <input checked="" type="checkbox"/> In <input type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 15.9 | Circular | Corrugated Metal | 84 |

Pipe Seal Condition

| | Severity |
|-------------------------------|---|
| | 0 1 2 3 4 |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia |
|-------------------------------------|--------------------------|---------------|---------------|---|-----------|--------------------------|--------------------------|-------|----------|------------------|-----|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 002838ND | <input checked="" type="checkbox"/> In <input type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 15.9 | Circular | Corrugated Metal | 60 |

Pipe Seal Condition

| | Severity |
|-------------------------------|---|
| | 0 1 2 3 4 |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |










Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**







Manhole No **000393SMH**

Photos

| Photo Name | Description | PhotoType | Old Photo Name |
|---|--|---------------|----------------|
| 000393SMH_Topside_20120309_5988.JPG | | Topside | 0947431J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | |
| 000393SMH_Cover_20120309_5989.JPG | | Cover | 0947501J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | |
| 000393SMH_Frame_20120309_5990.JPG | | Frame | 0948341J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | |
| 000393SMH_Chimney-Shaft_20120309_5991.J | | Chimney-Shaft | 0948411J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | |
| 000393SMH_Chamber_20120309_5992.JPG | | Chamber | 0949021J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | |
| 000393SMH_General_20120309_5993.JPG | INCOMING PIPE FROM 000390SMH* | General | 0953391J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | |
| 000393SMH_General_20120309_5994.JPG | INCOMING PIPE FROM 000390SMH* | General | 0953441J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | |



Alexandria Manhole and Lamping Inspection FormBasin No. **FOUR MILE RUN**Manhole No **000393SMH**

| | | | |
|---|--------------------------------------|---------|--------------|
| 000393SMH_General_20120309_5995.JPG | SIZE OF INCOMING PIPE FROM 000392SMH | General | 0954271J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000393SMH_General_20120309_5996.JPG | INCOMING PIPE FROM 000392SMH | General | 0954331J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000393SMH_General_20120309_5997.JPG | INCOMING PIPE FROM 000392SMH | General | 0954371J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000393SMH_General_20120309_5998.JPG | SIZE OF INCOMING PIPE FROM 002829ND | General | 0955081J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000393SMH_General_20120309_5999.JPG | INCOMING PIPE FROM 002829ND | General | 0955191J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000393SMH_General_20120309_6000.JPG | INCOMING PIPE FROM 002829ND | General | 0955311J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000393SMH_General_20120309_6001.JPG | INCOMING PIPE FROM 002829ND | General | 0955431J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000393SMH_General_20120309_6002.JPG | INCOMING PIPE FROM 002829ND | General | 0955491J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |



Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000393SMH**

000393SMH_General_20120309_6003.JPG

SIZE OF OUTGOING PIPE TO 000369SMH

General

0956131J.JPG

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000393SMH_General_20120309_6004.JPG

OUTGOING PIPE TO 000369SMH

General

0956361J.JPG

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000393SMH_General_20120309_6005.JPG

OUTGOING PIPE TO 000369SMH

General

0956451J.JPG

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000393SMH_General_20120309_6006.JPG

OUTGOING PIPE TO 000369SMH

General

0956511J.JPG

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Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000374SMH**

Inspection Information

Insp Date/Time **3/9/2012**
 Crew **Truck 1**
 Crew Affiliation **Field1**
 Permit No **V08093003**
 Insp Purpose **Routine assessment/asse**
 Inspection Type **Surface Inspection**
 Why not Inspected

Owner Information

Project No.
 Project No. 2
 Project Name
 Map No
 Use of Sewer **Stormwater**

Manhole Information

Structure Type **Manhole Standard**
 Coating/Liner Type **None - No Coating/Lining**
 Address **4622** **KING ST**
 City, State, Zip **Alexandria, VA 00000**
 Location Code **Light Highway Rural Street**
 X **11879535.4** Y **6992596.499**
 Elevation **138.95**
 Grade (0, +, -, /)
 Flow Type
 DS pipe length(ft)
 Depth to MH Invert(ft) **20.9**
 Pre-cleaning **No Pre-Cleaning**

☒ Complete ☐ Quick ☐ Incomplete ☐ Returned

Inspection Setting Information

MH Surface Type **Asphalt**
 Traffic Volume **Medium/Fair**
 Traffic Type **3 - 4 Lane**
 Weather **Dry**
 Ground Cond **Dry**

Manhole-Upper

Corrosion deterioration widespread ☒ 0 1 2 3 4
 Coating/lining deterioration

Manhole-Lower

Corrosion deterioration widespread ☒ 0 1 2 3 4
 Coating/lining deterioration

Cover / Adjustment Ring / Cover Insert

☐ No Cover ☒ No Cover Insert
☒ No Cover Gasket ☒ No Cover Adjustment Ring

Cover Type **Solid**
 Cover material **Cast-In-Place Concrete**

Cover Diam(ft) **24**
 Cover Width(ft)
 Cover Thickness(in) **3.25**
 No of vent holes **2**
 Avg vent hole dia(in) **1**
 Adj ring height(in)
 Cover bear surf diam/width
 Ponding depth(ft)
 Tributary area(sq ft)

Cover

| | 0 | 1 | 2 | 3 | 4 |
|-------------------------------|-------------------------------------|---|---|---|---|
| Missing or Displaced | <input checked="" type="checkbox"/> | | | | |
| Cracked / deteriorated | <input checked="" type="checkbox"/> | | | | |
| Fit in Frame | <input checked="" type="checkbox"/> | | | | |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | | | | |
| Surface wear | <input checked="" type="checkbox"/> | | | | |
| Missing Bolts or Broken Bolts | <input checked="" type="checkbox"/> | | | | |

Frame cont.

Frame

| | 0 | 1 | 2 | 3 | 4 |
|---------------------------------|-------------------------------------|---|---|---|---|
| Cracked / broken / deteriorated | <input checked="" type="checkbox"/> | | | | |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | | | | |
| Missing Bolts or Broken Bolts | <input checked="" type="checkbox"/> | | | | |
| Offset | <input checked="" type="checkbox"/> | | | | |
| Missing | <input checked="" type="checkbox"/> | | | | |

Frame Base Seal

| | 0 | 1 | 2 | 3 | 4 |
|---------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|---|
| Cracked / deteriorated | | <input checked="" type="checkbox"/> | | | |
| Corroded, pitted, spalled | | | <input checked="" type="checkbox"/> | | |
| Roots Intrusion | <input checked="" type="checkbox"/> | | | | |
| I/I evidence | | <input checked="" type="checkbox"/> | | | |

Chimney (Shaft) / Grade Ring Reducer (Cone, Slab) Chamber (Wall)

☒ No Chimney (Shaft) Seal ☒ No Grade Ring
☐ No Chimney (Shaft) ☒ No Reducer (Cone, Slab)

Material Diam in Width in Depth ft

Chimney **5** **2.4**

Chamber **5** **18.5**

Chimney (Shaft)

| | 0 | 1 | 2 | 3 | 4 |
|-----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|---|
| Previous rehab | <input checked="" type="checkbox"/> | | | | |
| Cracked | | <input checked="" type="checkbox"/> | | | |
| Corroded, pitted, spalled | | | <input checked="" type="checkbox"/> | | |
| Mortar missing | <input checked="" type="checkbox"/> | | | | |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> | | | | |
| Collapse | <input checked="" type="checkbox"/> | | | | |
| I/I evidence | | <input checked="" type="checkbox"/> | | | |

Chamber (Wall) cont.

Chamber

| | 0 | 1 | 2 | 3 | 4 |
|-----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|---|
| Cracked | | <input checked="" type="checkbox"/> | | | |
| Corroded, pitted, spalled | | | <input checked="" type="checkbox"/> | | |
| Mortar missing | <input checked="" type="checkbox"/> | | | | |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> | | | | |
| Grease | <input checked="" type="checkbox"/> | | | | |
| Utility conduit | <input checked="" type="checkbox"/> | | | | |
| Joint Offset or Seal | <input checked="" type="checkbox"/> | | | | |
| Collapse | <input checked="" type="checkbox"/> | | | | |
| Lift hole plugs missing | <input checked="" type="checkbox"/> | | | | |
| I/I evidence | | <input checked="" type="checkbox"/> | | | |

Bench Steps

Channel (Invert)

☒ No Bench ☒ No Steps
☒ No Channel ☒ No Common MH Partition

Surcharge Depth(ft)

Frame and Frame Seal

☐ No Frame ☐ No Frame Base Seal

Frame material **3**
 Frame bearing surf diam(in) **24**
 Frame bearing surf width(in)
 Frame bearing surf dwell(in) **1**
 Frame offset dist(in)
 Frame depth(in) **8**
 Frame seal material **39**
 Clear opening diam(in) **22**
 Clear opening width(in)

Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000374SMH**

Notes / Sketch

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia |
|-------------------------------------|--------------------------|---------------|---------------|---|-----------|--------------------------|-------------------------------------|-------|----------|---------------------|-----|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 004040SMH | <input checked="" type="checkbox"/> In <input type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9.3 | Circular | Reinforced Concrete | 24 |

Pipe Seal Condition

| | Severity |
|-------------------------------|---|
| | 0 1 2 3 4 |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia |
|-------------------------------------|--------------------------|---------------|---------------|---|-----------|--------------------------|-------------------------------------|-------|----------|---------------------|-----|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 000371SMH | <input checked="" type="checkbox"/> In <input type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9.3 | Circular | Reinforced Concrete | 30 |

Pipe Seal Condition

| | Severity |
|-------------------------------|---|
| | 0 1 2 3 4 |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia |
|-------------------------------------|--------------------------|---------------|---------------|---|-----------|--------------------------|--------------------------|-------|----------|---------------------|-----|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 000369SMH | <input checked="" type="checkbox"/> In <input type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 20.3 | Circular | Reinforced Concrete | 60 |

Pipe Seal Condition

| | Severity |
|-------------------------------|---|
| | 0 1 2 3 4 |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia |
|-------------------------------------|--------------------------|---------------|---------------|---|-----------|--------------------------|--------------------------|-------|----------|---------------------|-----|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 000186ND | <input type="checkbox"/> In <input checked="" type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 20.9 | Circular | Reinforced Concrete | 60 |

Pipe Seal Condition

| | Severity |
|-------------------------------|---|
| | 0 1 2 3 4 |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia |
|-------------------------------------|--------------------------|---------------|---------------|---|-----------|--------------------------|-------------------------------------|-------|----------|---------------------|-----|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 002839ND | <input checked="" type="checkbox"/> In <input type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4 | Circular | Reinforced Concrete | 15 |

Pipe Seal Condition

| | Severity |
|-------------------------------|---|
| | 0 1 2 3 4 |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

Lamping Observations








| SCREAM Defect Code | Distance |
|--------------------|--|
| PGEN | Pipe - General Remark - |
| Description: | did not attempt to find origin of line |

Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000374SMH**

Photos

| Photo Name | Description | PhotoType | Old Photo Name |
|---|---|---------------|----------------|
| 000374SMH_Cover_20120309_6036.JPG | | Cover | 1036061J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | | |
| 000374SMH_Frame_20120309_6037.JPG | | Frame | 1036381J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | | |
| 000374SMH_Chimney-Shaft_20120309_6038.J | | Chimney-Shaft | 1036551J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | | |
| 000374SMH_General_20120309_6039.JPG | SIZE OF INCOMING PIPE FROM 002839ND | General | 1037271J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | | |
| 000374SMH_General_20120309_6040.JPG | INCOMING PIPE FROM 002839ND | General | 1037301J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | | |
| 000374SMH_General_20120309_6041.JPG | INCOMING PIPE FROM 002839ND | General | 1037371J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | | |
| 000374SMH_General_20120309_6042.JPG | SIZE OF INCOMING PIPE FROM 004040SMH | General | 1038191J.JPG |
|  | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | | |



Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000374SMH**

000374SMH_General_20120309_6043.JPG

NCOMING PIPE FROM 004040SMH

General

1038251J.JPG

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000374SMH_General_20120309_6044.JPG

NCOMING PIPE FROM 004040SMH

General

1038321J.JPG

L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec



000374SMH_General_20120309_6045.JPG

NCOMING PIPE FROM 004040SMH

General

1038371J.JPG

L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec



000374SMH_General_20120309_6046.JPG

SIZE OF INCOMING PIPE FROM 000371SMH

General

1038511J.JPG

L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec



000374SMH_General_20120309_6047.JPG

INCOMING PIPE FROM 000371SMH

General

1038561J.JPG

L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec



000374SMH_General_20120309_6048.JPG

INCOMING PIPE FROM 000371SMH

General

1039021J.JPG

L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec



000374SMH_General_20120309_6049.JPG

INCOMING PIPE FROM 000371SMH

General

1039061J.JPG

L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec



000374SMH_General_20120309_6050.JPG

INCOMING PIPE FROM 000371SMH


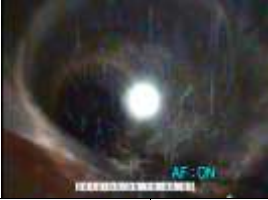



General

1039121J.JPG

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Alexandria Manhole and Lamping Inspection FormBasin No. **FOUR MILE RUN**Manhole No **000374SMH**

| | | | |
|---|------------------------------|---------|--------------|
| 000374SMH_General_20120309_6051.JPG | INCOMING PIPE FROM 000369SMH | General | 1040371J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000374SMH_General_20120309_6052.JPG | INCOMING PIPE FROM 000369SMH | General | 1040531J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000374SMH_General_20120309_6053.JPG | INCOMING PIPE FROM 000369SMH | General | 1041171J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000374SMH_General_20120309_6054.JPG | OUTGOING PIPE TO 000186ND | General | 1041301J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000374SMH_General_20120309_6055.JPG | OUTGOING PIPE TO 000186ND | General | 1041371J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000374SMH_General_20120309_6056.JPG | OUTGOING PIPE TO 000186ND | General | 1041411J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |



Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000369SMH**

Inspection Information

Insp Date/Time **3/9/2012**
 Crew **Truck 1**
 Crew Affiliation **Field1**
 Permit No **V08093003**
 Insp Purpose **Routine assessment/asse**
 Inspection Type **Surface Inspection**
 Why not Inspected

Owner Information

Project No.
 Project No. 2
 Project Name
 Map No
 Use of Sewer **Stormwater**

Manhole Information

Structure Type **Manhole Standard**
 Coating/Liner Type **None - No Coating/Lining**
 Address **4622** **KING ST**
 City, State, Zip **Alexandria, VA 00000**
 Location Code **Light Highway Rural Street**
 X **11879481.63** Y **6992565.377**
 Elevation **137.88**
 Grade (0, +, -, /)
 Flow Type
 DS pipe length(ft)
 Depth to MH Invert(ft) **16.3**
 Pre-cleaning **No Pre-Cleaning**

☒ Complete ☐ Quick ☐ Incomplete ☐ Returned

Inspection Setting Information

MH Surface Type **Asphalt**
 Traffic Volume **Medium/Fair**
 Traffic Type **3 - 4 Lane**
 Weather **Dry**
 Ground Cond **Dry**

Manhole-Upper

Corrosion deterioration widespread ☒ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4
 Coating/lining deterioration

Manhole-Lower

Corrosion deterioration widespread ☒ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4
 Coating/lining deterioration

Cover / Adjustment Ring / Cover Insert

☐ No Cover ☒ No Cover Insert
☒ No Cover Gasket ☒ No Cover Adjustment Ring

Cover Type **Heavy Duty**
 Cover material **Concrete Segments (bolte)**

Cover Diam(ft) **24**
 Cover Width(ft)
 Cover Thickness(in) **3.25**
 No of vent holes **2**
 Avg vent hole dia(in) **1**
 Adj ring height(in)
 Cover bear surf diam/width
 Ponding depth(ft)
 Tributary area(sq ft)

Cover

| | 0 | 1 | 2 | 3 | 4 |
|-------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Missing or Displaced | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cracked / deteriorated | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Fit in Frame | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Surface wear | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Missing Bolts or Broken Bolts | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Frame cont.

Frame

| | 0 | 1 | 2 | 3 | 4 |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|
| Cracked / broken / deteriorated | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Missing Bolts or Broken Bolts | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Offset | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Frame Base Seal

| | 0 | 1 | 2 | 3 | 4 |
|---------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Cracked / deteriorated | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I/I evidence | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Chimney (Shaft) / Grade Ring Reducer (Cone, Slab) Chamber (Wall)

☒ No Chimney (Shaft) Seal ☒ No Grade Ring
☐ No Chimney (Shaft) ☒ No Reducer (Cone, Slab)

Material Diam in Width in Depth ft

Chimney **5** **3.8**

Chamber **5** **12.5**

Chimney (Shaft)

| | 0 | 1 | 2 | 3 | 4 |
|-----------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| Previous rehab | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cracked | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mortar missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Collapse | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I/I evidence | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Chamber (Wall) cont.

Chamber

| | 0 | 1 | 2 | 3 | 4 |
|-----------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| Cracked | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corroded, pitted, spalled | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mortar missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Roots Intrusion | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Grease | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Utility conduit | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Joint Offset or Seal | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Collapse | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Lift hole plugs missing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I/I evidence | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Bench Steps

Channel (Invert)

☒ No Bench ☒ No Steps
☒ No Channel ☒ No Common MH Partition

Surcharge Depth(ft)

Frame and Frame Seal

☐ No Frame ☐ No Frame Base Seal

Frame material **3**
 Frame bearing surf diam(in) **24**
 Frame bearing surf width(in)
 Frame bearing surf dwell(in) **1**
 Frame offset dist(in)
 Frame depth(in) **8**
 Frame seal material **39**
 Clear opening diam(in) **22**
 Clear opening width(in)

Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000369SMH**

Notes / Sketch

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia | | | | | | | | | | | | |
|---|---|---------------|---------------|---|-----------|--------------------------|--------------------------|-------|----------|---------------------|-----|--|----------|--|-----------|--------------|---|-------------------------------|---|--------------|---|-----------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 000393SMH | <input checked="" type="checkbox"/> In <input type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 15.8 | Circular | Reinforced Concrete | 60 | | | | | | | | | | | | |
| Pipe Seal Condition <table border="1"> <thead> <tr> <th></th> <th>Severity</th> </tr> <tr> <th></th> <th>0 1 2 3 4</th> </tr> </thead> <tbody> <tr> <td>I/I evidence</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Mortar, "boot", or other seal</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Pipe cracked</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Roots Intrusion</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </tbody> </table> | | | | | | | | | | | | | Severity | | 0 1 2 3 4 | I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | Severity | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 2 3 4 | | | | | | | | | | | | | | | | | | | | | | |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 000374SMH | <input type="checkbox"/> In <input checked="" type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 16.2 | Circular | Reinforced Concrete | 60 | | | | | | | | | | | | |
| Pipe Seal Condition <table border="1"> <thead> <tr> <th></th> <th>Severity</th> </tr> <tr> <th></th> <th>0 1 2 3 4</th> </tr> </thead> <tbody> <tr> <td>I/I evidence</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Mortar, "boot", or other seal</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Pipe cracked</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Roots Intrusion</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </tbody> </table> | | | | | | | | | | | | | Severity | | 0 1 2 3 4 | I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | Severity | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 2 3 4 | | | | | | | | | | | | | | | | | | | | | | |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |










Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000369SMH**

Photos









| Photo Name | Description | PhotoType | Old Photo Name |
|---|--------------------------------------|---|----------------|
| 000369SMH_Topside_20120309_6021.JPG | | Topside | 1019051J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | |
| 000369SMH_Cover_20120309_6022.JPG | | Cover | 1019091J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | |
| 000369SMH_Frame_20120309_6023.JPG | | Frame | 1019401J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | |
| 000369SMH_Chimney-Shaft_20120309_6024.J | | Chimney-Shaft | 1019491J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | |
| 000369SMH_General_20120309_6025.JPG | UNDERDRAIN | General | 1020291J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | |
| 000369SMH_General_20120309_6026.JPG | UNDERDRAIN | General | 1020341J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | |
| 000369SMH_General_20120309_6027.JPG | SIZE OF INCOMING PIPE FROM 000393SMH | General | 1021561J.JPG |
|  | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspect | |



Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole No **000369SMH**

| | | | |
|---|------------------------------------|---------|--------------|
| 000369SMH_General_20120309_6028.JPG | INCOMING PIPE FROM 000393SMH | General | 1022041J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000369SMH_General_20120309_6029.JPG | INCOMING PIPE FROM 000393SMH | General | 1022131J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000369SMH_General_20120309_6030.JPG | INCOMING PIPE FROM 000393SMH | General | 1022221J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000369SMH_General_20120309_6031.JPG | SIZE OF OUTGOING PIPE TO 000374SMH | General | 1022551J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000369SMH_General_20120309_6032.JPG | OUTGOING PIPE TO 000374SMH | General | 1023041J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000369SMH_General_20120309_6033.JPG | OUTGOING PIPE TO 000374SMH | General | 1023131J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000369SMH_General_20120309_6034.JPG | OUTGOING PIPE TO 000374SMH | General | 1023221J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |
| 000369SMH_General_20120309_6035.JPG | OUTGOING PIPE TO 000374SMH | General | 1023291J.JPG |
| L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspec | | | |
|  | | | |



Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole N **009022IN**

Inspection Information

Insp Date/Time **3/29/2012**
 Crew **Truck 1**
 Crew Affiliation **Field1**
 Permit No **V08093003**
 Insp Purpose **Routine assessment/asse**
 Inspection Type **Surface Inspection**
 Why not Inspected

Owner Information

Project No.
 Project No. 2
 Project Name
 Map No
 Use of Sewer **Stormwater**

Manhole Information

Structure Type
 Coating/Liner Type **None - No Coating/Lining**
 Address **4700**
 City, State, Zip
 Location Code **Sidewalk**
 X Y
 Elevation
 Grade (0, +, -,)
 Flow Type
 DS pipe length(ft)
 Depth to MH Invert(ft) **19.2**
 Pre-cleaning **No Pre-Cleaning**

☒ Complete ☐ Quick ☐ Incomplete ☐ Returned

Inspection Setting Information

MH Surface Type **Concrete Pavement**
 Traffic Volume **Low/Good**
 Traffic Type **Parking**
 Weather **Dry**
 Ground Cond **Dry**

Manhole-Upper

Corrosion deterioration widespread ☒ 0 1 2 3 4
 Coating/lining deterioration

Manhole-Lower

Corrosion deterioration widespread ☒ 0 1 2 3 4
 Coating/lining deterioration

Cover / Adjustment Ring / Cover Insert

☐ No Cover ☒ No Cover Insert
☒ No Cover Gasket ☒ No Cover Adjustment Ring

Cover Type **Solid**
 Cover material **Cast Iron**

Cover Diam(ft) **21**
 Cover Width(ft)
 Cover Thickness(in) **3.25**
 No of vent holes **2**
 Avg vent hole dia(in) **1**
 Adj ring height(in)
 Cover bear surf diam/width
 Ponding depth(ft)
 Tributary area(sq ft)

Cover

| | 0 | 1 | 2 | 3 | 4 |
|-------------------------------|-------------------------------------|---|---|---|---|
| Missing or Displaced | <input checked="" type="checkbox"/> | | | | |
| Cracked / deteriorated | <input checked="" type="checkbox"/> | | | | |
| Fit in Frame | <input checked="" type="checkbox"/> | | | | |
| Corroded, pitted,spalled | <input checked="" type="checkbox"/> | | | | |
| Surface wear | <input checked="" type="checkbox"/> | | | | |
| Missing Bolts or Broken Bolts | <input checked="" type="checkbox"/> | | | | |

Frame cont.

Frame

| | 0 | 1 | 2 | 3 | 4 |
|---------------------------------|-------------------------------------|---|---|---|---|
| Cracked / broken / deteriorated | <input checked="" type="checkbox"/> | | | | |
| Corroded, pitted,spalled | <input checked="" type="checkbox"/> | | | | |
| Missing Bolts or Broken Bolts | <input checked="" type="checkbox"/> | | | | |
| Offset | <input checked="" type="checkbox"/> | | | | |
| Missing | <input checked="" type="checkbox"/> | | | | |

Frame Base Seal

| | 0 | 1 | 2 | 3 | 4 |
|--------------------------|-------------------------------------|---|---|---|---|
| Cracked / deteriorated | <input checked="" type="checkbox"/> | | | | |
| Corroded, pitted,spalled | <input checked="" type="checkbox"/> | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> | | | | |
| I/I evidence | <input checked="" type="checkbox"/> | | | | |

Chimney (Shaft) / Grade Ring Reducer (Cone, Slab) Chamber (Wall)

☒ No Chimney (Shaft) ☒ No Chimney (Shaft) Seal
☒ No Grade Ring ☒ No Reducer (Cone, Slab)

Material Diam in Width in Depth ft

Chamber **5** **19.2**

Chamber (Wall) cont.

Chamber

| | 0 | 1 | 2 | 3 | 4 |
|-----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|---|
| Cracked | | | <input checked="" type="checkbox"/> | | |
| Corroded, pitted,spalled | | | <input checked="" type="checkbox"/> | | |
| Mortar missing | <input checked="" type="checkbox"/> | | | | |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> | | | | |
| Grease | <input checked="" type="checkbox"/> | | | | |
| Utility conduit | <input checked="" type="checkbox"/> | | | | |
| Joint Offset or Seal | <input checked="" type="checkbox"/> | | | | |
| Collapse | <input checked="" type="checkbox"/> | | | | |
| Lift hole plugs missing | <input checked="" type="checkbox"/> | | | | |
| I/I evidence | | <input checked="" type="checkbox"/> | | | |

Bench Steps

Channel (Invert)

☒ No Bench ☐ No Channel
☐ No Steps ☒ No Common MH Partition

Steps material **Plastic/Steel Composite**
 Surcharge Depth(ft)

Channel material **Corrugated Metal**

Steps

| | 0 | 1 | 2 | 3 | 4 |
|---------------------------------|-------------------------------------|---|---|---|---|
| Broken / missing / deteriorated | <input checked="" type="checkbox"/> | | | | |
| Corroded, pitted,spalled | <input checked="" type="checkbox"/> | | | | |

Channel

| | 0 | 1 | 2 | 3 | 4 |
|-------------------------------|-------------------------------------|---|---|---|---|
| Cracked | <input checked="" type="checkbox"/> | | | | |
| Corroded, pitted,spalled | <input checked="" type="checkbox"/> | | | | |
| Mortar missing | <input checked="" type="checkbox"/> | | | | |
| Bricks displaced or missing | <input checked="" type="checkbox"/> | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> | | | | |
| Grease | <input checked="" type="checkbox"/> | | | | |
| Debris/deposition | <input checked="" type="checkbox"/> | | | | |
| Pipe segment cracked, spalled | <input checked="" type="checkbox"/> | | | | |
| Hydraulic flow | <input checked="" type="checkbox"/> | | | | |
| I/I evidence | <input checked="" type="checkbox"/> | | | | |

Frame and Frame Seal

☐ No Frame ☐ No Frame Base Seal

Frame material **3**
 Frame bearing surf diam(in) **21**
 Frame bearing surf width(in)
 Frame bearing surf dwell(in) **1**
 Frame offset dist(in)
 Frame depth(in) **4**
 Frame seal material **39**
 Clear opening diam(in) **20**
 Clear opening width(in)

Alexandria Manhole and Lamping Inspection Form

Basin No.

FOUR MILE RUN

Manhole N

009022IN

Notes / Sketch

| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia | | | | | | | | | | | | |
|---|---|---------------|---------------|---|-----------|--------------------------|--------------------------|-------|----------|------------------|-----|--|----------|--|-----------|--------------|---|-------------------------------|---|--------------|---|-----------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 009023IN | <input checked="" type="checkbox"/> In <input type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 19.2 | Circular | Corrugated Metal | 72 | | | | | | | | | | | | |
| Pipe Seal Condition <table border="1"> <thead> <tr> <th></th> <th>Severity</th> </tr> <tr> <th></th> <th>0 1 2 3 4</th> </tr> </thead> <tbody> <tr> <td>I/I evidence</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Mortar, "boot", or other seal</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Pipe cracked</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Roots Intrusion</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </tbody> </table> | | | | | | | | | | | | | Severity | | 0 1 2 3 4 | I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | Severity | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 2 3 4 | | | | | | | | | | | | | | | | | | | | | | |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| New | N/A | Basin | Connecting MH | Flow Direction | Pipe Type | In Drop | Ex Drop | Depth | Shape | Matl | Dia | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | FOUR MILE RUN | 000393SMH | <input type="checkbox"/> In <input checked="" type="checkbox"/> Out | Storm | <input type="checkbox"/> | <input type="checkbox"/> | 19.2 | Circular | Corrugated Metal | 84 | | | | | | | | | | | | |
| Pipe Seal Condition <table border="1"> <thead> <tr> <th></th> <th>Severity</th> </tr> <tr> <th></th> <th>0 1 2 3 4</th> </tr> </thead> <tbody> <tr> <td>I/I evidence</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Mortar, "boot", or other seal</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Pipe cracked</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Roots Intrusion</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </tbody> </table> | | | | | | | | | | | | | Severity | | 0 1 2 3 4 | I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | Severity | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 2 3 4 | | | | | | | | | | | | | | | | | | | | | | |
| I/I evidence | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Mortar, "boot", or other seal | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Pipe cracked | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |
| Roots Intrusion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | |



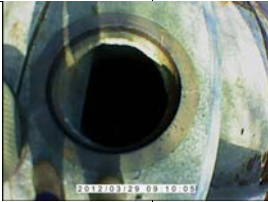
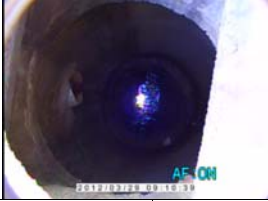
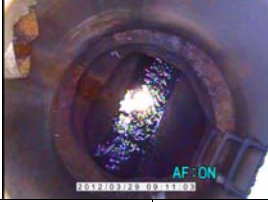
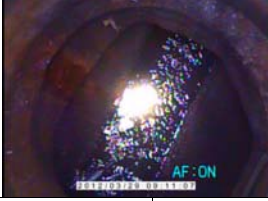



Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN**

Manhole N **009022IN**




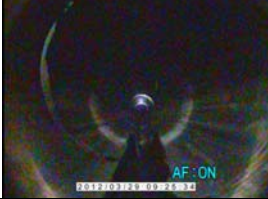




Photos

| Photo Name | Description | PhotoType | Old Photo Name |
|---|--------------------|-----------|---|
| 009022IN_Topside_20120329_1850.JPG | | Topside | 0909431J.JPG |
|  | | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe |
| 009022IN_Cover_20120329_1851.JPG | | Cover | 0909481J.JPG |
|  | | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe |
| 009022IN_Frame_20120329_1852.JPG | | Frame | 0910051J.JPG |
|  | | | L:\PROJECTS\City of Alexandria\125129 - Four Shed Survey and Modeling\VPS Inspe |
| 009022IN_Chamber_20120329_1853.JPG | | Chamber | 0910391J.JPG |
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| 009022IN_Chamber_20120329_1854.JPG | | Chamber | 0911031J.JPG |
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| 009022IN_Chamber_20120329_1855.JPG | | Chamber | 0911071J.JPG |
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| 009022IN_General_20120329_1856.JPG | SIZE OF UNDERDRAIN | General | 0912391J.JPG |
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Alexandria Manhole and Lamping Inspection Form

Basin No. **FOUR MILE RUN** Manhole N **009022IN**

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|---|-------------------------------------|---------|--------------|
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|  | | | |
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Alexandria Manhole and Lamping Inspection Form

Basin No.

FOUR MILE RUN

Manhole N

009022IN

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SIZE OF OUTGOING PIPE TO 000393SMH

General

0926341J.JPG



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OUTGOING PIPE TO 000393SMH

General

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OUTGOING PIPE TO 000393SMH

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General

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